

as the Japanese *sembe*) made of coarse flour or cracked wheat.

#### THE DENTIST NEEDS YOUR HELP

Thus diet has throughout life, indeed, even long before birth, an influence, often still underestimated, on the hardness of the teeth and their resistance against caries. Not only the type of food or the substances added to the diet are important, but also the preparing and the consistency. It is not enough to pay attention to one factor only. If a child, though stuffed with calcium preparations and vitamins, is fed a lot of cakes and sweets instead of at least

some hard foods that have not been deprived of their most important substances, its teeth will always be threatened by caries.

So we see that it is not within the power of the dentist to exterminate caries. All his efforts at maintaining the health of the teeth are in vain unless every single individual does his share. In the whole wide field of public health there are probably few similar examples to show how, by following simple rules of diet and living, a person may contribute to such an extent toward his own health, the health of his children, and thus of his nation.

## SAILORS IN CONVOYS

By ALBERTO Da CRUZ

*Every day we read in the newspapers about the grim struggle taking place between the Allied merchant fleets and the Axis U-boats. Many are the accounts of this struggle seen through the eyes of the pursuer—the U-boat. But we hardly know anything about how this struggle looks through the eyes of the crews of the pursued Allied freighters. In the following article we present an account of this duel as it appears to them. How the material for this article was collected is told by the author, a young Portuguese journalist in Shanghai.—K.M.*

**W**HEN the war broke out in the Pacific almost two years ago, it performed a bloodless operation in segregating for the duration a few hundred Scandinavian sailors from the sea. The war cut a swathe through their ranks, and to many of them it meant waking up one Monday morning and realizing that Shanghai was to be their enforced home for as long as hostilities might last. A few accepted this uncertain period of idleness as a blessing to restore them from war wrecks to a sounder balance of mind, but many inwardly resented being deprived of their natural element, the sea.

I am staying in a place where a number of these sailors have made their home. It has not been hard to get to know them well, as sailors are the friendliest people alive, if you understand their moods and leave well enough alone. They represent most of the northern European countries whose young men

have taken to the sea, and almost all have seen war service in one way or another before being stranded so unexpectedly in Shanghai.

They are all neutral merchant sailors who are not connected with the Allied navies. From the way they express their dislike for navies in general you feel that there is too much rivalry between them to make mutual fellowship possible. Even the long partnership of danger that followed the outbreak of the war in Europe has not brought about a relaxing of this somewhat instinctive dislike. These merchant sailors appear to have a notion that too much credit is given to the navy when they, too, have met with considerable hazards in the course of their war-time duty.

They are a bunch of hardy fellows who have been through it all. The interval between the outbreak of the European

war and the Pacific hostilities has provided them with a moment in their mercantile careers which they say they will never forget. Their lot in peace time is comparatively easy, but in time of war it becomes a very serious business. All the elements of danger are there to confront them, all the perils, risks, and uncertainties which are interwoven so intricately into the complex pattern of total warfare.

#### WHY THEY DO IT

These hundred or so stranded Scandinavians live in scattered parts of the town, but the bonds which tied them formerly have not been broken, and whenever they meet today all talk is centered on their exploits immediately preceding the Pacific war. The convoy service, about which so little is known in this part of the world, is what they enjoy talking about. Discussion on any subject will ultimately end with a heated debate on the merits of the convoy system. For, they say, the duties of merchant sailors in time of war are almost exclusively confined nowadays to taking part in convoy sailings. Only in a few instances do skippers of small hulks get leave to sail from port alone, as a current idea prevailing among shipping circles centers on the greater protection afforded ships when they sail in groups.

At first I was surprised to learn that neutral seamen were openly working for belligerents, but I was told that in many instances the seamen had no choice. It was always a case of working, or else. The importance of keeping the Atlantic trade lines active without interruption to maintain the life of the British Isles has imposed upon the British Admiralty the task of recruiting all available seamen; and when coaxing is not enough, other persuasive measures are resorted to. High bonuses and really flattering pay have so far made it possible for ships to sail out of British ports on schedule.

#### CUMBERSOME NECESSITY

Immediately after the outbreak of the European war, when the depletion in the ranks of the British merchant marine

was beginning to leave its mark on the war efforts of the nation, it was seen that merchantmen would have to sail in convoys, thus going back to the days of Nelson. It was an expensive, cumbersome method, and it made severe calls upon escorting destroyers, which could ill be spared. The entry of the United States into the war resulted in an urgently required augmentation of the destroyer force. German submarines based in home waters, in spite of everything, soon made the Irish coast an unhealthy zone for the ships of both nations, and imposed upon the British Navy another large and worrying area. The united naval forces of the two countries could not achieve an adequate protection of the merchant ships, which were exposed to systematic destruction.

The purpose underlying the convoy is to conduct a group of merchantmen safely in and out of the dangerous zones immediately surrounding the harbors, before which lurk the submarines. Once well out to sea they are left to their own devices, unless a number of vessels have the same destination, when a small escort may be asked for. There are divided opinions upon the wisdom of this latter precaution, since it seems obvious that with a crowd of vessels the U-boat finds an easier target.

#### PRELIMINARIES TO A CONVOY

To take a convoy out of harbor, therefore, without the most adequate protection, is to invite attention, and every possible precaution is taken. Hours before the sailing of the convoy, which is kept a strict secret among the skippers, dozens of small craft go outside the harbor and attempt to make the surface too lively for the lurking submarines. Above them in the sky airplanes cruise, spotting in the deeper water, while further out a destroyer patrols.

There are more preliminaries than these before the convoy can sail. There is the education of the sailors themselves, and a fearful task it is. For several days the ships will run into harbor to gather there for instructions, back from

the various ports where freights have been taken aboard. The collecting and dispersal of convoys involve considerable risks, and much confusion at times. You heard, for instance, of a ship from America with a cargo of flour and steel rods. The flour was at the bottom of the hold, and the rods on top. The ship was destined for Liverpool and Cardiff. A blunder somewhere resulted in the ship running into Liverpool, to find that her bottom cargo, flour, was to be unloaded there, her steel in Cardiff. Much language on the part of the skipper did not alter things. The port officer remained adamant. So she sailed again to get rid of her steel, and to return with her flour to Liverpool. On the coastwise route she was sunk, and both cargoes and the ship were lost.

The first task in educating the sailors of the convoy is to collect them from their camouflaged ships as they lie in port. In choppy weather this is no light task, in addition to which the reluctant skippers are convinced that it is all tomfoolery. They think they can sail their ships better than any "damn naval officer." Some dozen of them, representing a few nationalities, are herded in a small room belonging to the Senior Naval Officer's headquarters. He must have a gift for languages, and a particular gift for an unofficial but international language understood by all these men.

#### THE HATED MAN

Poor fellows, they are full of anxiety. They come from British, American, Scandinavian, and South American ships, with crews gathered everywhere. They drive despair into the heart of the ablest commander afloat. And yet this miscellaneous fleet has to be marshaled and made to sail with absolute precision, or the consequences would be unpleasant.

The ships, of course, are as diversified as the crews. Old ships and new ones, with high hulls and low hulls, ships of seven knots up to twelve, with crews from ten to forty, with masts of all heights and guns of all sizes, have to be reduced to a dead level. The dead level

is determined by the maximum speed of the slowest boat, and her skipper, as a result, is a hated man. Again and again through the instructional lecture he will remind the Senior Naval Officer that, at her best, his ship can only do seven knots, and he isn't even sure about that.

The lecture finished, they are given sealed orders, not to be opened unless one of them falls out of the convoy. They have to steam up and weigh anchor at noon. The little skipper again reminds the Senior Naval Officer that his ship can only do seven knots at her best, while the skipper of a fourteen-knotter scowls at him; he will be imperiled because of that miserable little coffin-hulk.

#### ORDER OUT OF CHAOS

And so, true to schedule, they weigh anchor at noon. Out of harbor a destroyer will herd the ships on each side and another destroyer acts as whipper-in. The fishing boats have been busy all morning keeping the waters choppy; above, planes are on patrol. But within the harbor there is grief, and gnashing of teeth, and language. Getting that convoy out is a terrible business. The Senior Naval Officer hops up and down the bridge of his pilot boat. He looks like a schoolmaster with a birch, and the things he says about some of those skippers who are doing strange things with their ships! For getting a convoy under way involves terrific strain. When a battle fleet puts out to sea, the commodore leads captains who know what he wants, who command crews that obey instantly, who handle ships equipped with every device to assist seamanship. But the poor merchant skipper is usually in charge of an old hulk that should have been scrapped long ago, with a crew gathered from all quarters of the globe, surly and slow, and with engines credited with perhaps twelve knots at the insurance company but only capable of eight in practice.

And there are other difficulties. She carries a British gunner and a British signaller. It is here that the Scandinavians complain most arduously against the policy

of the British Admiralty for its unsystematic mixing of experienced seamen with beginners, and allowing favored officers the key positions which rightly belong to more experienced men. The signalman was perhaps measuring cloth in a draper's shop six months before; it is now his business to wag it systematically at the end of a stick, but he is very nervous, and the signal from the commodore comes too quick, so the unhappy skipper gets a very jumbled message whose instructions he cannot understand. The gunner, too, is new and nervous. At the slightest suspicion of anything queer he will begin shooting wildly. He will do his best, but in the hottest moment of combat it is not rare that the other ships of the convoy bear the brunt of his activity, and he is not helped by an excited crew bawling at him from all quarters at the last moment.

#### OUT TO SEA

The Senior Naval Officer gets the ships into formation, big and little, six abreast. But they may not sail yet, which creates trouble. The big ship can scarcely keep steam down, against which it is sternly warned, since steam will tell the submarines outside that they are sailing; but on the other hand, the little fellow who can only do seven knots at his very best has stoked up to bursting point in his endeavor to be ready for that start. The Senior Naval Officer gives his signal for them to weigh anchor, and a curt query flies to each laggard. As they all turn into position with uniformity, he is mollified. Then slowly they move toward the harbor mouth like an army on the march.

Here the trouble really begins. At sea all the ships of the convoy will maintain a set distance apart, but in leaving harbor they must reduce this distance, and the ships proceeding abreast must close in to pass the mouth. The skippers always have a dread of collision. They do not like those ships closing in on each side; the proximity of neighbors ahead, on the port, starboard and astern, try them sorely. In addition, they have the

anxiety of watching the commodore's signals, of maintaining correct lengths and speed. But all is attempted. They clear the harbor mouth, the gray cliffs fall behind, before them is the open sea, suddenly gleaming.

Soon they are well out. The engines of the convoy purr like fire-warmed cats. The sea in their wake is marbled with the wash from the propellers. The day slips from the world with imperceptible stealth. A veil of dusk falls over the troubled waters, a last gull screams and flies westwards, silhouetted black against a crimson streak of sky; a desolation greater than that of the desert is wrapped around them. They creep into a shadowland—beyond them is a dark sea of peril.

#### THE WARDROOM

Life on a merchant ship stripped for action, as were these merchantmen perforce, does not offer the amenities of a battle cruiser or of a ship in peace time. The space is confined. A crew of from ten to forty, with a correspondingly small executive, offers little diversity. If you cannot get on with the favored officers, who are always in your way in the stuffy wardroom, then life is hell. There are moments when the Scandinavians in the convoy are ripe for murder. It is only the thrill of danger that compensates, the greater activity, pay, and risks undertaken that draw them to this branch of the Allied services, they say.

The hatchway is a glorified coalhole, but clean and polished. When you descend you find yourself in a small, low room, lit with electric lights, in an atmosphere compounded of tobacco smoke, cooking, and anthracite. The pictorial decorations are in keeping with wardroom traditions; alluring houris from the crayon of a famous artist reveal their charms through diaphanous drapery, flanked by appealing pages of charmingly lewd French magazines. A row of books shrug their ragged backs at one. A gramophone lifts its adenoidal voice above the purr of engines. Among the general litter—for wardrooms of merchantmen in the convoy service are

privileged in their untidiness—there is perhaps a bundle of old newspapers sent by kind but misguided people who think seamen will find them absorbing. Soon you know everyone, not only by face but by nature; and, gradually, too, all the peculiarities of their progenitors are revealed.

But it is night now, and there is not a light, scarcely a movement, except of the black sea racing by, swirling onwards, cuffed with foam. The engines hum, driving the convoy through the impenetrable darkness. Under the covers of the trained torpedoes you can feel the cold war heads. Beneath each gun and tube a recumbent figure betrays itself with sonorous breathing.

#### DETECTION !

The men are sleeping at their stations. Silently, stealthily, the ships proceed, when suddenly bells shatter the silence. The sleeping, motionless figures and the subdued guns are galvanized into furious activity. The illusion of having entered a mine field—an illusion that is somehow more tolerable than the U-boat—is dis-

pelled by the sound of torpedoes ramming into the sides of ships. What the men had dreaded is happening. They have been detected, after all.

Several hits, several flashes, and a frantic, agonizing confusion reigns. The escaped oil from the tanks covers the sea, the men struggle in it, and suddenly there is a sheet of flame as it takes fire. The destroyers, which have swerved from their course to avoid being hit, have recovered from their shock and give chase. But, their work completed, the U-boats have submerged. As depth charges are assiduously dropped with the uncertain prospect of hits, the convoy breaks up and the ships scatter to proceed alone. The sealed orders are then opened and read. A complete change in plans takes place. The wounded are treated, the dead taken care of, many are rescued from the flaming wrecks, and dawn, a faint blue streak, glimmers on the horizon. There are moans and groans, men collapse and ships are blown up, but the public knows nothing. A heavy veil enshrouds this service, and the neutrals whose lives are sacrificed are regarded as negligible ciphers.

